

# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY	DOCKET NO.
09/583,729	05/31/00	OMI	K	106330	
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MM91/1015 OLIFF & BERRIDGE PLC			MULLI	NS.B	
P 0 B0X 19928			ART U	NIT PA	PER NUMBER
ALEXANDRIA V	/A 22320		2834		
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

10/15/01

Application No.

09/583,729

**Burton S. Mullins** 

Applicant(s)

Office Action Summary

Examiner

Art Unit 2834

Omi

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) X Responsive to communication(s) filed on Sep 28, 2001 2b) This action is non-final. 2a) X This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) X Claim(s) 1 and 2 \_\_\_\_\_\_is/are pending in the application. 4a) Of the above, claim(s) \_\_\_\_\_\_\_ is/are withdrawn from consideratio 5) Claim(s) is/are allowed. 6) X Claim(s) 1 and 2 is/are rejected. 7) Claim(s) is/are objected to. 8) Claims are subject to restriction and/or election requirement **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are objected to by the Examiner. 11) The proposed drawing correction filed on is: a approved b disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some \* c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) BURTON S. MULLINS 18) Interview Summary (PTO-413) Paper No(s). 15) Notice of References Cited (PTO-892) PRIMARY EXAMINER 19) Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20) Other:

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#### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed 9-28-01 have been fully considered but they are not persuasive. Applicant describes Wrobel in detail but ignores the teachings of Mouri et al. The latter appears to teach the feature of "displacement [of the inner races of the bearings] while accommodating their positions to the direction of the shaft" since the inner bearings are displaced from one another by a spacing S to control pre-pressure in a wider range during manufacture.

# Claim Rejections - 35 USC § 112

2. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1-2, recitation "...being displaced while accommodating their positions to the direction of the shaft" is vague, indefinite and confusing. First, it is not clear what the subject of this participial phrase is. Are the two ball bearings "displaced while accommodating their positions...", or the inner races, or the outer races, or some combination of these three? Second, it is not clear what "displaced while accommodating their positions to the direction of the shaft" means. Does this mean the ball bearings and/or races stay fixed in one place or that they move relative to the shaft or some "direction"? Does "accommodating [a] position" mean maintaining that position? Finally, the phrase "the direction of the shaft" is not clear. Does this refer to a direction along an axis of the shaft, and if so, which direction, if not both?

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## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrobel (US 5274289) in view of Mouri et al. (US 6010247). Wrobel teaches the basic fan motor structure including a shaft 14 supported by dual ball bearings 12a in plastic bearing box 11a; a ring magnet 13a; and a stator 11 with windings (not numbered) supplied with current. The ball bearings are inserted from one side and secured by clip 20. The inner race of one bearing is pushed by spring 5 toward the other bearing (Fig.1).

Wrobel does not teach that the outer race of each bearing is longer axially than the inner race.

Mouri teaches a duplex bearing device including first and second inner races 12a and 13a set to be smaller in width than the widths of first and second outer races 12b and 13b (Fig.1; abstract). A displacement S separates the first and second inner races. The first and second inner races "accommodate their positions to the direction of the shaft" since they are fixed to the shaft. In another interpretation, the second inner race can be said to accommodate its position since before being fixed to the shaft, it is slidable relative thereto (c.4, lines 46-47). In any case, provision of the displacement S between the inner races allows control over pre-pressure in a wider range during manufacture (c.4, lines 60-63).

It would have been obvious to modify Wrobel and provide inner bearing races having smaller width than outer bearing races, with a displacement therebetween, per Mouri since it would have been desirable to control pre-pressure over a wide range during manufacture.

### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is (703) 305-7063.

bsm

October 12, 2001

BURTON S. MULLINS PRIMARY EXAMINER